Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-12 (Canceled)

- 13. (Currently Amended) A method for enciphering a sequence of clear text data values comprising:
 - a. nested shuffling each of a plurality of large random secrets, using a plurality of mixing keys thus forming a plurality of shuffled large random secrets wherein each of the plurality of large random secrets is a random value and further wherein the plurality of shuffled large random secrets are each a random value and wherein the plurality of mixing keys are random and secret;
 - b. performing an exclusive OR on the plurality of shuffled large random
 secrets to produce a plurality of large random pads wherein the plurality of
 large random pads have less entropy than the plurality of shuffled large
 random secrets;
 - c. circularly rotating the values of each of the plurality of large random pads
 according to a plurality of random rotation values thus forming a plurality
 of rotated large random pads wherein the plurality of random rotation
 values are random and secret;
 - d. randomly shuffling a portion of each of the plurality of rotated large random pads according to a plurality of working keys thus forming a

- plurality of randomly rotated and randomly shuffled large random pads wherein the plurality of working keys are random and secret;
- e. performing an exclusive OR function on the plurality of randomly rotated and randomly shuffled large random pads to produce a final <u>pad wherein the final pad has less entropy than the plurality of randomly rotated and randomly shuffled large random pads;</u>
- f. selecting a portion of the final pad to form a finite key stream; and
- g. performing an exclusive OR function with the finite key stream with the sequence of clear text data values.
- 14. (Previousy Amended) The method according to Claim 13 further comprising substituting a value within each of the plurality of shuffled large random secrets with a new random value using a plurality of substitution keys thus forming a plurality of nested shuffled and substituted large random secrets.
- 15. (Original) The method according to Claim 13 further comprising substituting a value within each of the plurality of large random secrets with a new random value using a plurality of substitution keys thus forming a plurality of substituted large random secrets.
- 16. (Previously Amended) The method according to Claim 13 further comprising selecting a series of portions of the final pad to form the finite key stream.

- 17. (Previously Amended) The method according to Claim 13 further comprising transmitting the plurality of large random secrets, a plurality of substitution keys, the plurality of mixing keys, the plurality of working keys and the plurality of rotation values from a central server.
- 18. (Previously Amended) The method according to Claim 13 further comprising transmitting the plurality of large random secrets, a plurality of substitution keys, the plurality of mixing keys, the plurality of working keys and the plurality of rotation values from a storage device.
- 19. (Currently Amended) A method for <u>deciphering</u> enciphering a sequence of cipher text data values comprising:
 - a. nested shuffling each of a plurality of large random secrets, using a plurality of mixing keys thus forming a plurality of shuffled large random secrets wherein each of the plurality of large random secrets is a random value and further wherein the plurality of shuffled large random secrets are each a random value and wherein the plurality of mixing keys are random and secret;
 - b. performing an exclusive OR on the plurality of shuffled large random secrets to produce a plurality of large random pads wherein the plurality of large random pads have less entropy than the plurality of shuffled large random secrets;
 - c. circularly rotating the values of each of the plurality of large random pads according to a plurality of random rotation values thus forming a

plurality of rotated large random pads wherein the plurality of random rotation values are random and secret;

- d. randomly shuffling a portion of each of the plurality of rotated large random pads according to a plurality of working keys thus forming a plurality of randomly rotated and randomly shuffled large random pads wherein the plurality of working keys are random and secret;
- e. performing an exclusive OR function on the plurality of randomly rotated and randomly shuffled large random pads to produce a final pad wherein the final pad has less entropy than the plurality of randomly rotated and randomly shuffled large random pads;
- f. selecting a portion of the final pad to form a finite key stream; and
- g. performing an exclusive OR function with the finite key stream with the sequence of cipher text data values.
- 20. (Previously Amended) The method according to Claim 19 further comprising substituting a value within each of the plurality of shuffled large random secrets with a new random value using a plurality of substitution keys thus forming a plurality of nested shuffled and substituted large random secrets.
- 21. (Previously Amended) The method according to Claim 19 further comprising selecting a series of portions of the final pad to form the finite key stream.
- 22. (Previously Amended) The method according to Claim 19 further comprising transmitting the plurality of large random secrets, a plurality of substitution

keys, the plurality of mixing keys, the plurality of working keys and the plurality of rotation values from a central server.

23. (Previously Amended) The method according to Claim 19 further comprising transmitting the plurality of large random secrets, a plurality of substitution keys, the plurality of mixing keys, the plurality of working keys and the plurality of rotation values from a storage device.

Claims 24-29 (Canceled)